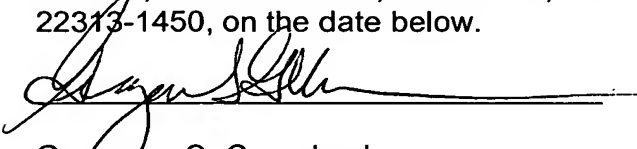


Patent  
PD-201014  
Customer No. 020991

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Ernest C. Chen : I hereby certify that this correspondence is  
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SPECTRAL EFFICIENCIES FOR : 22313-1450, on the date below.  
LAYERED AND CONVENTIONAL :  
MODULATIONS :   
: Georgann S. Grunebach  
: Typed or printed name of person signing certificate  
Group Art Unit: To be determined :  
Examiner: To be determined Date: April 25, 2005

**INFORMATION DISCLOSURE STATEMENT**

Mail Stop PCT  
Commissioner for Patents  
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Dear Sir:

The references cited on the enclosed form PTO/SB/08A may be relevant or material to the examination of the above-identified patent application and are, therefore, submitted in compliance with the duty of disclosure defined in 37 CFR 1.56. It is respectfully requested that the references be considered and made of record in the application identified above.

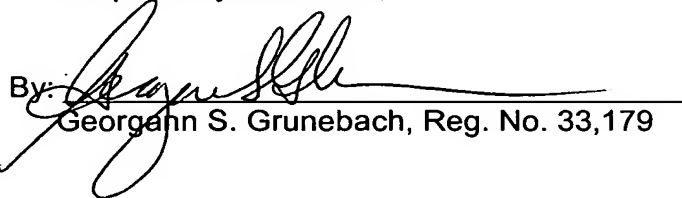
This statement should be considered because it is being submitted within three months of the date of entry of the national stage as set forth in §1.491 in an international application under 37 C.F.R. §1.97(b)(2). Accordingly, it is submitted that no fee is due in this matter.

However, if it is determined that any appropriate fee is due, the Commissioner is hereby authorized to charge Deposit Account No. 50-0383 of Hughes Electronics Corporation, El Segundo, California.

U.S. National Stage of International Application No. PCT/US03/032800.....Page 2

This Information Disclosure Statement is not to be construed as a representation that a search has recently been made, that additional information material to the examination of this application does not exist, or that this citation constitutes prior art.

Respectfully submitted,

By:   
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10/532619

JC12 Rec'd PCT/PTC 25 APR 2005

PTO/SB/08A (08-03)

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| Substitute for form 1449/PTO<br><br><b>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b><br>(Use as many sheets as necessary) | <b>Complete if Known</b> |                 |
|   | Application Number       | To be assigned  |
|   | Filing Date              | Herewith        |
|   | First Named Inventor     | Ernest. C. Chen |
|   | Art Unit                 | To be assigned  |
|   | Examiner Name            | To be assigned  |
| Sheet 1 of 1  | Attorney Docket Number   | PD-201014       |

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